

CLAIM AMENDMENTS

Please amend claims 1-3 and 5 and add claims 57-69 as follows:

1. (Currently amended) A prepolymer, which is an isocyanate terminated prepolymer, is substantially free of unreacted hydroxyl groups and is prepared by reacting a mixture comprising:

- (a) at least one multifunctional compound containing three or more amine or isocyanate groups,
- (b) at least one diisocyanate, and
- (c) at least one diol,

wherein said diol has a weight average molecular weight of at most 7000, said prepolymer has a viscosity of at most 100,000 cps at 70°C, and said prepolymer, when reacted with an excess of water, forms a hydrogel polymer.

2. (Currently amended) A prepolymer, prepared by reacting a mixture comprising:

- (a) at least one triisocyanate,
 - (b) at least one diisocyanate, and
 - (c) at least one polyalkylene oxide having two terminal hydroxyl groups,
- wherein a molar ratio of (a):(b):(c) in said mixture is 0.9-1.1:1.8-3.3:1.8~~[2]~~-3.3, said at least one polyalkylene oxide has weight average molecular weight of at most 7000, and
- said prepolymer, when reacted with an excess water, forms a hydrogel polymer.

3. (Previously presented) A prepolymer, which is an isocyanate terminated prepolymer, is substantially free of unreacted hydroxyl groups and is prepared by reacting a mixture comprising:

- (a) at least one triol,
 - (b) at least one diisocyanate, and
 - (c) at least one polyalkylene oxide having two terminal hydroxyl groups,
- wherein a molar ratio of (a):(b):(c) in said mixture is 0.9-1.1:4.5-5.5:1.8-2.2:~~4.5-5.5~~,

~~5.5~~,

said at least one polyalkylene oxide has a weight average molecular weight of at most 7000, and

said prepolymer, when reacted with an excess water, forms a hydrogel polymer.

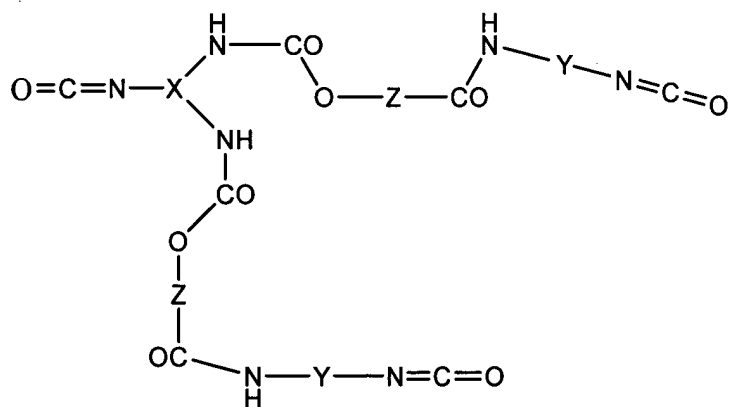
4. (Previously presented) The prepolymer of claim 2, wherein said molar ratio of (a):(b):(c) in said mixture is 0.97-1.03:1.94-2.06:1.94-2.06, and said at least one polyalkylene oxide has a weight average molecular weight of 1000-2000.

5. (Currently amended) The prepolymer of claim 3, wherein said molar ratio of (a):(b):(c) in said mixture is 0.97-1.03:~~1.94-2.06~~:4.85-5.15:1.94-2.06, and said at least one polyalkylene oxide has a weight average molecular weight of 1000-2000.

6. (original) The prepolymer of claim 4, wherein said prepolymer has a viscosity of 1000 to 50,000 cps at 70°C.

7. (original) The prepolymer of claim 5, wherein said prepolymer has a viscosity of 1000 to 50,000 cps at 70°C.

8. (original) A prepolymer of formula I:



Formula I

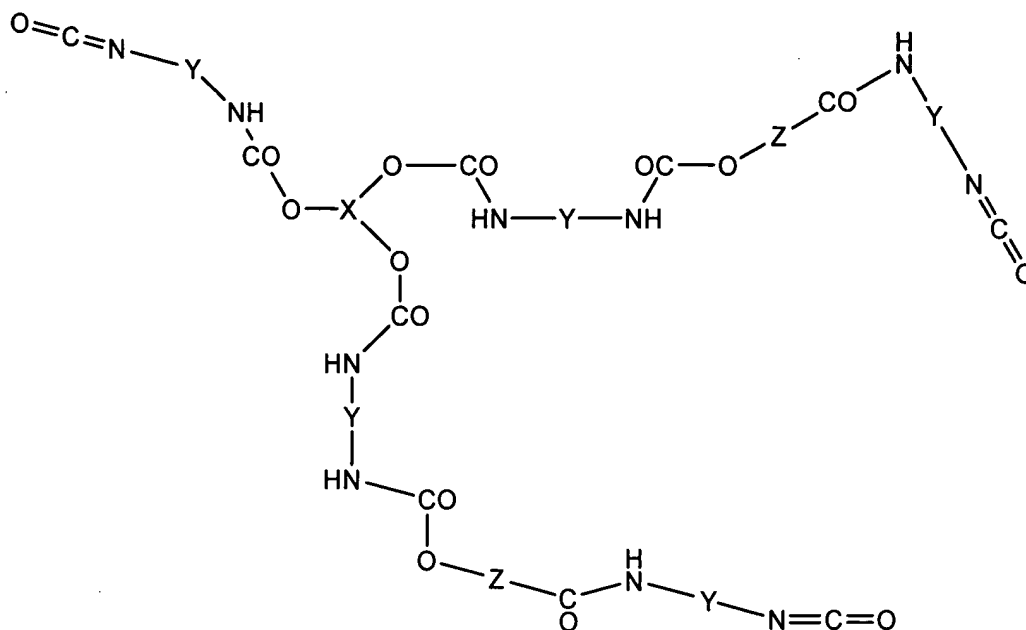
wherein X is a trivalent organic group containing 3-20 carbon atoms;

Y is a divalent organic group containing 3-20 carbon atoms;

Z is an oligomer consisting of monomer units selected from the group consisting of $-(CH_2-CH_2-O)-$, $-(CH_2-CH(CH_3)-O)-$, $-(CH(CH_3)-CH_2-O)-$, $-(CH_2-CH(CH_2-CH_3)-O)-$, $-(CH(CH_2-CH_3)-CH_2-O)-$, and $-(CH(CH_3)-CH(CH_3)-O)-$, and

Z has a weight average molecular weight of at most 7000.

9. (original) A prepolymer of formula II:



Formula II

wherein X is trivalent organic group containing 3-20 carbon atoms;

Y is divalent organic group containing 3-20 carbon atoms;

Z is an oligomer consisting of monomer units selected from the group consisting of $-(CH_2-CH_2-O)-$, $-(CH_2-CH(CH_3)-O)-$, $-(CH(CH_3)-CH_2-O)-$, $-(CH_2-CH(CH_2-CH_3)-O)-$, $-(CH(CH_2-CH_3)-CH_2-O)-$, and $-(CH(CH_3)-CH(CH_3)-O)-$, and

Z has a weight average molecular weight of at most 7000.

10. (original) The prepolymer of claim 8, wherein

Y is a divalent aliphatic group,

Z has a weight average molecular weight of 1000-2000, and

Said prepolymer has a viscosity of 1000 to 50,000 cps at 70°C.

11. (original) The prepolymer of claim 9, wherein

Y is a divalent aliphatic group,

Z has a weight average molecular weight of 1000-2000, and

Said prepolymer has a viscosity of 1000 to 50,000 cps at 70°C.

12-45. (cancelled)

46. (Previously presented) The prepolymer of claim 1, wherein component (a) is at least one triisocyanate compound selected from the group consisting of the isocyanurate trimer of hexamethylene diisocyanate, 2,4,6-toluene triisocyanate, p,p',p''-

triphenylmethane triisocyanate, the isocyanurate of isophorone diisocyanate, and the trifunctional biuret of hexamethylene diisocyanate.

47 – 54. (cancelled)

55. (Canceled)

56. (Canceled)

57. (New) The prepolymer of claim 2, wherein the triisocyanate is the isocyanurate trimer of hexamethylene diisocyanate, 2,4,6-toluene triisocyanate, p,p',p''-triphenylmethane triisocyanate, the isocyanurate of isophorone diisocyanate, or the trifunctional biuret of hexamethylene diisocyanate.

58. (New) The prepolymer of claim 2, wherein the diisocyanate is methylenedicyclohexyl diisocyanate, hexamethylene diisocyanate, isophorone diisocyanate, toluene-2,4-diisocyanate, toluene-2,6-diisocyanate, ethylene diisocyanate, ethylidene diisocyanate, propylene-1,2-diisocyanate, cyclohexylene-1,2-diisocyanate, ethylene diisocyanate, ethylidene diisocyanate, propylene-1,2-diisocyanate, cyclohexylene-1,4-diisocyanate, m-phenylene diisocyanate, 3,3''-diphenyl-4,4''-biphenylene diisocyanate, 4,4''-biphenylene diisocyanate, 4,4''-diphenylmethane diisocyanate, 3,3''-dichloro-4,4''-biphenylene diisocyanate, 1,6-hexamethylene diisocyanate, 1,4-tetramethylene diisocyanate, 1,10-decamethylene diisocyanate, cumene-2,4-diisocyanate, 1,5-naphthalene diisocyanate, 1,4-cyclohexylene diisocyanate, p-tetramethyl xylylene diisocyanate, p-phenylene diisocyanate, 4-methoxy-1,3-phenylene diisocyanate, 4-chloro-1,3-phenylene diisocyanate, 4-bromo-1,3-phenylene diisocyanate, 4-ethoxy-1,3-phenylene diisocyanate, 2,4-dimethyl-1,3-phenylene diisocyanate, 5,6-dimethyl-1,3-phenylene diisocyanate, 2,4-diisocyanatodiphenylether, 4,4''-diisocyanatodiphenylether, benzidine diisocyanate, 4,6-dimethyl-1,3-phenylene diisocyanate, 9,10-anthracene diisocyanate, 4,4'-diisocyanatodibenzyl, 3,3'-dimethyl-4,4'-diisocyanatodiphenylmethane, 2,6-dimethyl-4,4'-diisocyanatodiphenyl, 2,4-diisocyanatostilbene, 3,3'-dimethoxy-4,4'-diisocyanatodiphenyl, 1,4-anthracenediisocyanate, 2,5-fluorenediisocyanate, 1,8-naphthalene diisocyanate, 2,6-diisocyanatobenzofuran, polymeric 4,4'-diphenylmethane diisocyanate, xylylene diisocyanate, or m-tetramethyl xylylene diisocyanate.

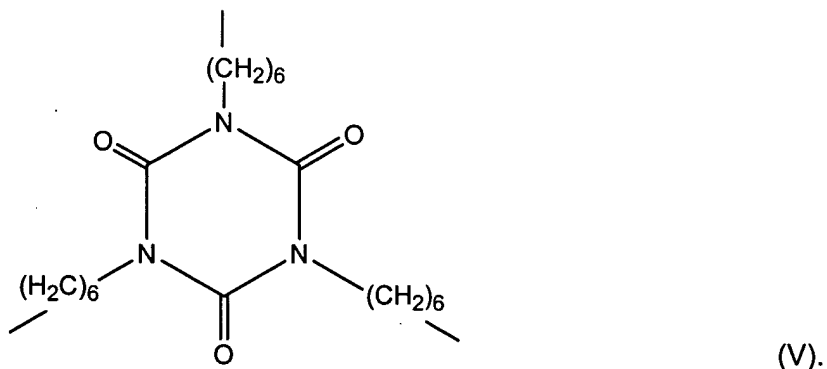
59. (New) The prepolymer of claim 2, wherein the triol is glycerol, trimethylol propane, sorbitol, or triethanolamine.

60. (New) The prepolymer of claim 8, wherein the trivalent organic group X contains heteroatoms selected from the group consisting of oxygen, nitrogen, sulfur, and halogens.

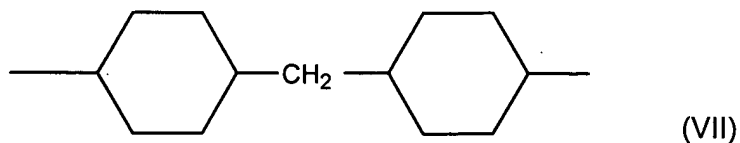
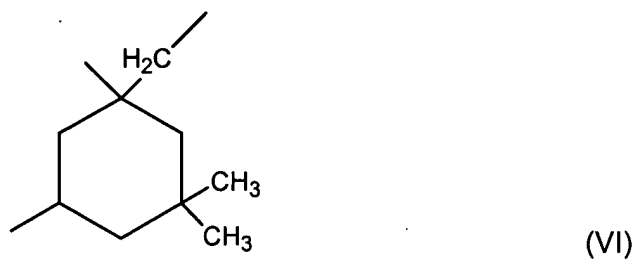
61. (New) The prepolymer of claim 60, wherein X is a saturated or unsaturated cyclic group or a saturated or unsaturated acyclic alkyl group.

62. (New) The prepolymer of claim 61, wherein X is a 6-membered cyclic group containing at least one nitrogen.

63. (New) The prepolymer of claim 62, wherein X is a group of formula (V)



64. (New) The prepolymer of claim 8, wherein Y is a group of Formula (VI) or (VII).

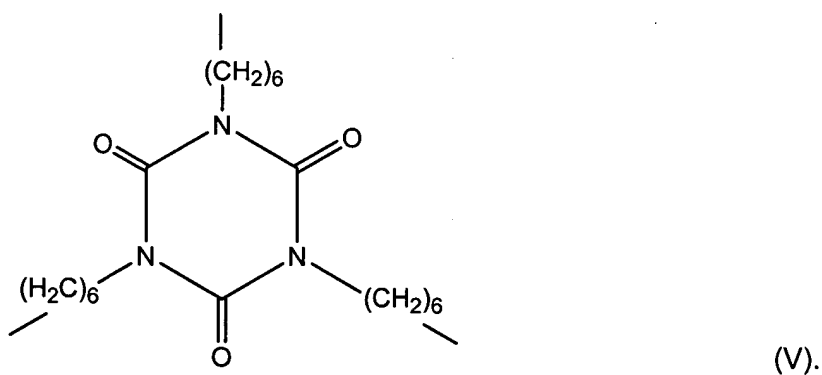


65. (New) The prepolymer of claim 9, wherein the trivalent organic group X contains heteroatoms selected from the group consisting of oxygen, nitrogen, sulfur, and halogens.

66. (New) The prepolymer of claim 65, wherein X is a saturated or unsaturated cyclic group or a saturated or unsaturated acyclic alkyl group.

67. (New) The prepolymer of claim 66, wherein X is a 6-membered cyclic group containing at least one nitrogen.

68. (New) The prepolymer of claim 67, wherein X is a group of formula (V)



69. (New) The prepolymer of claim 9, wherein Y is a group of Formula (VI) or (VII).

